

Docket No. END920010082

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application: Greenfield et al.

Group Art Unit: : IBM Corporation

Examiner: : Intellectual Property Law

Serial No.: : Dept. N50, Bldg. 040-4

Filed: Herewith : 1701 North Street

: Endicott, NY 13760

Title: PROGRAMMABLE VERTICAL FILTER FOR VIDEO ENCODING

Commissioner for Patents Washington, D.C. 20231

Dear Sir:

## INFORMATION DISCLOSURE STATEMENT

It is respectfully requested that the publications identified below and listed on the enclosed PTO-1449 Form(s) be considered by the United States Patent and Trademark Office (USPTO) in the subject United States patent application and be made of record therein. A copy of each publication is enclosed, and this submission is otherwise believed to be in compliance with 37 C.F.R. Sections 1.97 and 1.98. This information is all the material information, as defined in 37 C.F.R. Section 1.56(a), of which the submitter is aware. However, no representation is made or intended that a search has been made or that no other such material information exists.

## **PATENTS**

1.	4,882,627	2.	5,367,629	3.	5,438,374
4.	5,502,489	5.	5,557,330	6.	5,606,373
7.	5,621,465	8.	5,621,468	9.	5,764,307
10.	5,867,221	11.	5,926,220	12.	5,926,224
13.	5,953,506	14.	5,959,693	15.	5,974,193
16.	5,977,947	17.	6,005,626	18.	6,037,986
19.	6,061,100	20.	6,067,125	21.	6,108,047
22.	6,208,693	23.	6,233,277		

24. Clear Motion Integrated Noise Reduction System, DiviCom, September 1999.

- 25. Interpolating Images To Higher Resolution Using A Feedforward 'Neural', IBM Technical Disclosure Bulletin, Vol. 35, No. 1A, June 1992.
- 26. "Design of HDTV subband filterbanks considering VLSI implementation constraints", Pestel, U.; Gruger, K., IEEE Trans. on Circuits and Systems for Video Technology, March 1991, vol. 1, Is. 1, pp. 14-21.
- Efficient DCT-Domain Pre-filtering inside a Video Encoder, 27. S.D. Kim, et al., Proceedings of the SPIE - The International Society for Optical Engineering, vol. 4067, pt. 1-3, pp. 1579-1588.
- J.D. Greenfield, et al., pending U.S. patent application Serial No. 09/838,758, filed April 19, 2001, entitled "Simultaneous Vertical Spatial Filtering And Chroma Conversion In Video Images".

None of the above-cited publications, taken singularly or in combination, is believed to teach or suggest the invention as defined by the claims provided in the instant application.

Respectfully submitted,

Req. No. 31,789

Dated: January 21 , 2002

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Fax No.:

(518) 452-5579

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INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)					•	Greenfield et al.					
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				U.S	. PATENT	DOCUMENTS			Jc828		
*EXAMINER	<u> </u>	DOCUMENT NUMBER		DATE	NAME		CLASS	SUBCLASS	FILING DAT	E	
INTIAL	AA	4,8	82,627	11/21/89	Keesen et al.		358	166	II AITROIT	MATE	
<del></del>	AB	5,3	67,629	11/22/94	Chu et a	ıl.	395	162			
	AC	5,4	38,374	08/01/95 Yan			348	620			
	AD	5,5	02,489	03/26/96	Kim et al. Astle		348	607			
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Clear Motion Integrated Noise Reduction System, DiviCom, September 1999.									,		
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		Interpolating Images To Higher Resolution Using A Feedforward 'Neural', IBM Technical Disclosure Bulletin, Vol. 35, No. 1A, June 1992.							. 35, No.		
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Form PTO-A820 (also form PTO-1449)

## ATTY DOCKET NO. SERIAL NO. END920010082 INFORMATION DISCLOSURE CITATION Greenfield et al. (Use several sheets if necessary) FILING GROUP Herewith **U.S. PATENT DOCUMENTS** FILING DATE \*EXAMINER SUBCLASS NAME CLASS DOCUMENT NUMBER DATE IF APPROPRIATE INITIAL AL 07/20/99 348 413 5,926,224 Nagasawa 395 200.61 ΑM 09/14/99 Kalra et al. 5,953,506 AN 09/28/99 Wu et al. 348 624 5,959,693 AO 10/26/99 382 261 5,974,193 Baudouin Potu 345 ΑP 127 11/02/99 5,977,947 AQ 02/21/99 Ding 348 416 6,005,626 AR 348 409 6,037,986 03/14/00 Zhang et al. AS Ward et al. 348 607 6,061,100 05/09/00 ΑT 05/23/00 May 348 607 6,067,125 ΑU 348 581 08/22/00 Chen 6,108,047 ΑV Chen et al. 375 240.24 6,208,693 03/27/01 **FOREIGN PATENT DOCUMENTS** TRANSLATION CLASS SUBCLASS DATE COUNTRY DOCUMENT NUMBER YES NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

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"Design of HDTV subband filterbanks considering VLSI implementation constraints", Pestel, U.; Gruger, K., IEEE Trans. on Circuits and Systems for Video Technology, March 1991, vol. 1, Is. 1, pp. 14-21.

Efficient DCT-Domain Pre-filtering inside a Video Encoder, S.D. Kim, et al., Proceedings of the SPIE - The International Society for Optical Engineering, vol. 4067, pt. 1-3, pp. 1579-1588.

**EXAMINER** 

DATE CONSIDERED

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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		ВВ	J.D. Greenfield, et al., pending U.S. patent application Serial No. 09/838,758, filed April 19, 2001, entitled "Simultaneous Vertical Spatial Filtering And Chroma Conversion In Video Images".								
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